

Argyris is not talking about a little learning or a little change. He describes what is involved for a totally Theory X (his term is Model I) leader to learn to become an equally committed Theory Y (Model II) leader. He also shows that it has been done and with what results.

Leadership, Learning, and Changing the Status Quo

Chris Argyris

Changes in the status quo involve leadership. Yet an examination of the current literature on leadership, including the studies conducted by the other two contributors to this symposium, shows that most studies describe leadership activities as they exist and/or utilize criterion variables embedded in the present state of affairs. We need more research that illuminates how the present state of affairs can be changed and what role leadership can play in this quest.

Implicit in my position is the assumption that there may be something ineffective or dysfunctional in the current state of society. Donald Schon and I suggested that our society presently programs individuals with theories of action that generally are counterproductive to individual growth and organizational effectiveness. Moreover, these same theories are used to design organizations. One consequence is that even if applied effectively,

they tend to create organizational stagnation or organizational deterioration. Knowledge is needed to suggest how we may break out of this self-sealing cycle that, as John Gardner has argued, could lead to a societal catastrophe.

Leadership has been defined as effective influence. In order to influence effectively, a leader requires on-line, repetitive learning about his influence. In order to solve ill-structured, complex problems, a leader also requires on-line, repetitive learning about how well substantive issues are being explored. Effective leadership and effective learning are intimately connected.

Studying about learning in terms of potent, real-life problems for which solutions are to be applied and tested in the noncontrived world means that the research methods to be chosen must meet certain criteria. They must not rule out the complexity of real life

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—or, if they do, they must specify precisely how the knowledge learned in the experimental setting can be used in the noncontrived world. They must involve their subjects easily and deeply so that they maintain their interest over long periods of time. They must not require keeping secret the design of the experiment from their subjects; indeed, they should permit their involvement without losing the power of making generalizations about human learning. They must be capable of eliciting behavior on the part of their subjects in such a way that the subjects cannot hold the

design responsible for their actions. Otherwise, they may see no reason to accept personal responsibility for their behavior. The methods must be so powerful that the intended consequences can be brought about even under the most adverse circumstances, recognizing first, that their subjects may initially question their applicability and effectiveness (but not their moral validity); second, that their subjects are not able initially to behave in ways required by the experiment; third, that group behavior initially will be counterproductive; and last, that there will be few societal supports or rewards for learning the new behavior (otherwise we would be educating for the status quo).

I believe that it is possible to create these conditions in adult-learning environments with the requisite attracting, holding, and learning power. Part of this article will describe actual experiments in creating these conditions. But first we need to take a look at the theoretical foundations.

THEORETICAL FOUNDATIONS: THEORIES OF ACTION, ESPOUSED THEORIES, AND THEORIES-IN-USE

We start with three key assumptions:

1. Human action is shaped by the theories of action held by people. Leading and learning are examples of shaped human action.

2. People hold two kinds of theories of action. First is the theory that they are aware of and report; this we call their *espoused* theory. Second is the theory they hold that can be determined by observing their behavior; this we call their *theory-in-use*.

3. Espoused theories vary widely. However, there appears to be very little variance among theories-in-use. To date, 95 percent of the variance may be included under

Figure 1

MODEL I

<i>Governing Variables for Action</i>	<i>Action Strategies for the Individual and Toward His Environment</i>	<i>Consequences on the Individual and His Environment</i>	<i>Consequences on Learning</i>	<i>Effectiveness</i>
Achieve purposes as the individual perceives them	Design and manage environment so that the individual is in control over the factors relevant to him	Individual is seen as defensive	Self-sealing	Decreased effectiveness
Maximize winning and minimize losing	Own and control task	Defensive interpersonal and group relationships	Single-loop learning	
Minimize eliciting negative feelings	Unilaterally protect self	Defensive norms	Little public testing of theories	
Be rational and minimize emotionality	Unilaterally protect others from being hurt	Low freedom of choice, internal commitment, and risk taking		

one model—what we call Model I. The reason should become apparent as the research is described.

Picture human beings who have programmed themselves to behave in ways that are consistent with four governing values or variables (Figure 1). These are to (1) achieve the purpose as the individual has defined it; (2) win, not lose; (3) suppress negative feelings; and (4) emphasize rationality. In any situation, human behavior represents the most satisfactory solution people can find consistent with their governing variables.

I have further hypothesized that human beings have also learned a set of behavioral strategies that complement their governing values or variables. The primary strategies are to control unilaterally the relevant environment and tasks and to protect themselves

and others unilaterally. The underlying behavioral strategy is control over others. People vary tremendously in the way they control others, but few people do not behave in ways that control others and their environment.

These behavioral strategies, in turn, have consequences for the individual himself, for other people, and for the environment. Briefly, they tend to produce defensiveness and closedness in people because unilateral control does not tend to produce valid feedback. Moreover, unilaterally controlling behavior may be seen by others as signs of an individual's defensiveness.

In addition, I have hypothesized that the consequences above will tend to generate a particular kind and quality of learning that will go on within the individual and between the individual and the environment. There

will be little public testing of ideas (especially those that may be important and threatening). Consequently, individuals will neither seek nor receive more than a modicum of feedback that genuinely confronts their actions. They will tend to play it safe; they are not going to violate their governing values and upset others, especially if the others have power. Moreover, whatever learning individuals acquire will tend to fall within the confines of what is acceptable. This is called single-loop learning because, like a thermostat, individuals learn only about those subjects within the confines of their program. They will find out how well they are hitting their goal (maintaining a particular temperature). However, few people will confront the validity of the goal or the values implicit in the situation, just as a thermostat never questions its temperature setting. Such a confrontation would constitute double-loop learning. A teacher in a classroom, for example, may learn (single-loop) to ask students more specific questions in order to control student responses more readily; or the teacher may learn (double-loop) to reduce requirements for control in the classroom.

For most people there is a gap between their espoused theory and their theories-in-use, a gap of which they are unaware. Two reasons underlie this blindness: First, most people's theories-in-use include a proposition that states in effect, "If you see someone whose behavior is incongruent with what he or she espouses, for heaven's sake don't tell him or her because it will upset him or her and you will run the risk of eliciting feelings of rejection and hostility." Second, people programmed with Model I theories-in-use are so busy controlling others in order to win, to advocate their position, and to do so in a way that cannot be disproved or publicly tested that they create self-sealing processes. The others, for their part, are so busy fighting back

(they, too, are trying to win, advocate, and control) that there is little incentive for helping others to learn, especially if it may strengthen their position.

MODEL II AND DOUBLE-LOOP LEARNING

One possible model has been recently suggested that would lead to consequences that are the opposite of Model I, a model identified by Schon and myself as Model II. The governing variables of Model II are valid information, free and informed choice, and internal commitment. On the other hand, the behavior required to satisfy these values is not the opposite of Model I. For example, Model I emphasizes that individuals be as articulate as possible about their purposes, goals, and so forth and simultaneously control others and the environment in order to assure achievement of their goals. Model II does not reject the need to be articulate and precise about one's purposes. However, it does reject the unilateral control that usually accompanies advocacy because the purpose of advocacy typically is to win. Model II couples articulateness and advocacy with an invitation to others to confront one's views and possibly to alter them in order to reach a position that is based on the most valid information possible and to which everyone involved can become internally committed. This means the individual (in Model II) is skilled at inviting double-loop learning (Figure 2).

Each significant Model II action is evaluated in terms of the degree to which it helps the individuals involved generate valid and useful information (including relevant feelings), solve a problem in such a way that it remains solved, and do so without reducing the present level of problem-solving effectiveness.

The behavioral strategies of Model

Figure 2

MODEL II

<i>Governing Variables for Action</i>	<i>Action Strategies for the Individual and Toward His Environment</i>	<i>Consequences on the Individual and His Environment</i>	<i>Consequences on Learning</i>	<i>Effectiveness</i>
Valid information	Situations or encounters are designed to enable participants to originate actions and experience high personal causation	Individual is experienced as minimally defensive	Disprovable processes	Increased effectiveness
Free and informed choice			Double-loop learning	
Internal commitment to the choice and constant monitoring of the implementations	Task is controlled jointly	Minimally defensive interpersonal relations and group dynamics	Frequent public testing of theories	
	Protection of self is a joint enterprise and oriented toward growth	Learning-oriented norms		
	Protection of others is bilateral	High freedom of choice, internal commitment, and risk taking		

II involve sharing power with anyone who has competence and who is relevant in deciding or implementing an action. The definition of the task, the control over the environment, is shared with all the relevant participants. Saving one's own or the other person's face is rejected because it is seen as a defensive, nonlearning activity. If face-saving actions are necessary, they are planned jointly with the people involved.

Under these conditions, individuals will not tend to compete to make decisions for others, practice one-upmanship, and outshine others for the purposes of self-gratification. In a Model II world, people seek to find the most competent people to make a decision.

They seek to build viable decision-making networks in which the major function of the group is to maximize the contributions of each member so that a synthesis, whenever it develops, is based on the widest possible exploration of views.

Last, under Model II conditions, if new concepts are created, the meaning given to them by the creator and the processes used in developing them are open to scrutiny by all who are expected to use them. Also, the creator feels responsible for presenting evaluations in ways that encourage others to confront them openly and constructively.

If the governing values and behavioral strategies just outlined are used, the

degree of defensiveness within individuals, within groups, and among groups will tend to decrease. Free choice will tend to increase as will feelings of internal commitment. The consequences for learning should be an emphasis on double-loop learning that confronts the basic assumptions behind ideas or present views and that publicly tests hypotheses.

The end result should be increased decision-making or policy-making effectiveness, increased effectiveness in the monitoring of decisions and policies, and increased probability that errors and failures will be communicated openly and that participants in an action will learn from the feedback.

CASE OF THE NONPROFIT ADMINISTRATORS

So much for theory. Does it sound like a tall order? Is it clear that the switchover from a Model I to a Model II mode of behavior will take much time, involve much pain and agonized self-doubt, and require much professional assistance for the few with the motivation to run the course? All true—as our experience with a dozen different groups over the past several years has demonstrated. One research study of managers in the governmental sector illustrates the hypothesis tested in these dozen different learning environments: Knowing the models and having the opportunity to practice—under supportive conditions—may be a necessary, but is not a sufficient, condition for individuals to discover-invent-produce-generalize about the new Model II behavior.

The majority of the 100 manager-students were people with two to five years' experience as educational administrators, teachers, middle managers, governmental officials, middle- and top-level city and state officials, and a few first- and second-level business managers. All had read *Theory in Practice*, which described Models I and II in detail. The models were discussed in three two-hour class sessions. Toward the end of the sessions, the oral examinations that were held illustrated that the class members had mastered the key concepts in both models. Also, the students reported a strong interest in learning to behave in accordance with Model II.

At the beginning of the fourth session, the students were asked to read the following short case:

One of your subordinates has been performing inadequately for several months now. You've talked to him/her several times, and each time he/she has promised that performance would get better, but you don't see any evidence of this. Since you prefer not to fire him/her, you decide to make one more attempt. He/she walks into your office and asks: "Did you want to see me?"

They were asked to discover-invent-produce a solution. The production had to contain two parts, a short scenario of what the students as the actors in the case would say and do plus their feelings and thoughts about their behavior. They kept the original copy for a week as the basis for class discussion, and they gave the carbon copy to one of the faculty.

During the period between classes, the faculty members analyzed the cases to infer the degree to which they approximated Model I and Model II. All of the scorable cases (about 85) were categorized crudely in terms of the behavioral strategies manifested by the actors. Six behavioral strategies were identified:

1. The respondent attempts to get directly to the point that the subordinate is not producing adequately.

2. The respondent believes the subordinate is wrong but he wishes to start out indirectly and hopefully on a positive note.

3. The respondent couches the issue by acting as if he (respondent) has a problem. ("Yes, come in, I want to talk about a problem that I have.")

4. The respondent begins by describing his feelings of discomfort, by attempting to place the subordinate at ease, and then by describing the problem with the subordinate's performance.

5. The respondent asserts that the subordinate has a problem, that the respondent is there to help and not to punish (not to fire).

6. The respondent asserts that both have problems and perhaps both can be of help to each other.

All these behavioral strategies approximated Model I. No matter how direct or indirect, how warm or how cool the interviews began, the respondents tended to approximate Model I theories-in-use. To illustrate how this judgment was arrived at, let us examine a scenario that illustrates the first of the behavioral strategies listed:

Respondent (*Hope this won't hurt his feelings too much.*): Yes . . . I'm disturbed because I don't see much improvement.

Subordinate: I think my work has improved. I've had more work lately so that may be why you think there are more errors.

Respondent (*He doesn't really understand that there's a problem. That's a lie about more work. This is aggravating. I ought to just fire him, but actually he's kind of nice and comfortable to have around.*): I don't agree that you've had more work to do. In any case, I simply can't go on seeing this kind of work. What do you think we ought to do?

Analyzing this scenario we find that:

1. The respondent began by telling the subordinate he was disturbed because there had not been any improvement in his work (illustrates making judgments without publicly testing them).

2. The respondent's first feelings (the italicized parenthetical inserts) illustrated an attempt to satisfy to Model I governing variables of minimizing the expression of negative feelings.

3. The respondent's reaction to the subordinate's comment was an assessment made of the subordinate that was stated in such a way that it was not testable. Moreover, no attempt was made to test it publicly.

4. The covert assertion that the subordinate was lying was not tested publicly, partially in order not to arouse hostility.

5. The feelings of aggravation were suppressed (again minimizing the expression of negative feelings).

6. At this point, the respondent asserted that the organization could not be used to fulfill the subordinate's needs; the subordinate must perform. Yet the respondent, by being willing to keep the subordinate when he believed he or she should be fired, was fulfilling his personal needs in a way that may be inimical to the organization.

7. The first two sentences in the final voiced response showed the respondent's taking unilateral control. The last sentence appeared incongruent with unilateral control. The subordinate probably experienced it as the crucial question—namely, what he or she was going to do.

How typical are these responses? If we examine scenarios that are five to ten times longer than this, the pattern remains the same. That is, if the individuals begin with a Model I theory-in-use, they continue using the same theory-in-use. The changes that may be noted are that the dialogues become even more entrenched in Model I and the inconsistencies become more pronounced and glaring. The self-sealing processes become compounded and the level of holding back and/or deception increases. Moreover, these results continue when people use different modalities to express themselves (for example, going from writing to speaking to tape recording).

Subsequently, the manager-students broke down into small groups and studied the first strategy, chosen because it represented the most frequently used strategy. As consultants to the writer of the case, their task was to design an intervention to help the writer of the case cope with the problem in ways that approximated Model II. They were asked to invent a strategy and to appoint someone to produce the strategy.

After one-half hour of small group discussion, the class reassembled. The faculty member said that he would take the role of the writer. Each group representative described the intervention that they invented and then he/she would produce it through role playing.

The faculty member asked that the class monitor his behavior to make certain that he was not making it difficult for each group representative. The dialogues were all tape recorded. All of the inventions by the 11 small groups represented a mixture of Model I and Model II theories-in-use.

For example:

1. "He (the superior in the first case) should create an atmosphere where both can be open and share their feelings."

2. "He should create a situation so that each of them can develop the other's behavior rather than simply focus on her behavior."

3. "He should clarify for her the concrete expectations of work performance and the area that prevented him from firing her in spite of her inadequate performance."

4. "He should not control every aspect of the situation, including trying to minimize her expressing her negative feelings."

It appears that the students were learning Model II because they were inventing strategies that approximate Model II conditions. But such learning was at the conceptual level. What happens when the students attempt to transform the inventions (espoused theory) to theory-in-use?

We were able to obtain data to answer this question when the representatives from each group attempted to produce the inventions in the role-playing with the instructor. All the productions were judged by the class, the faculty members, and the *representatives who produced the inventions* (the latter after reflection), as approximating Model I. Moreover, an analysis of the transcript of the class discussion showed that when the productions were analyzed and discussed by the class members, these discussions also adhered to Model I.

Thus we have people who had read *Theory in Practice*; who had discussed it with one of the authors for three two-hour sessions; who met for a half hour to design the beginning of a Model II intervention; who invented Model I and II interventions, but who produced only Model I interventions. Moreover, it was the members of the class who had identified the inventions and productions as approximating Model I. Also, the class agreed that the faculty member could not be held responsible for the Model I behavior. Finally, an analysis of the members' behavior while

they were commenting on the production of each group showed that these responses also approximated Model I.

It is important to keep in mind that no representatives were aware that, when they produced their group's solution, they had produced a Model I intervention. Nor were the students aware that they did the same thing when they tried to help the representatives become aware that they were not producing Model II interventions. Thus the class members could invent Model II solutions but were unaware that they could not produce them.

Looking back on these cases, we note that the students produced solutions that, the class concluded, illustrated Model I theories-in-use. For example: In the first example of an invention for the case on page 34, the respondent invented a solution that was to create an atmosphere of mutual inquiry, yet the respondent (and the class) judged the production to be the opposite. Attributions and evaluations were made about the respondent's behavior that were never tested. The attributions and evaluations were hidden by the use of questions. The camouflage apparently worked only for the producer. Everyone else recognized the covert meanings.

In summary, motivation by itself is not the key to learning. As Don Schon and I explained in *Theory in Practice*, the learning process is a cycle that involves (1) discovering the problem, (2) inventing a solution (conceptual map), (3) producing the invention (performing in terms of actual behavior), and (4) generalizing what has been learned to other settings.

Each step in the cycle involves getting the participants to become aware of something of which they had habitually been unaware—for example, the discrepancy between their espoused theories and their theories-in-use.

People who wish to learn Model II theories-in-use must re-educate themselves in each phase. They need to learn to discover-invent-produce-generalize about how to discover, how to invent, how to produce, and how to generalize. Fortunately, people are not computers: They do not expect to be locked into their programs. They become increasingly frustrated, angry, and tense as evidence accumulates on their inability to help themselves or others to gain the competence they seek. Such feelings are a necessary part of the learning process. Learning that involves change in the governing variables of a theory-in-use comes about only through dilemmas—through an individual's gradual realization that he is confronted with a progressively intolerable conflict of central elements in his theory-in-use.

It is these reactions that lead people to become defensive—which, in turn, may lead people to use learning cycles that are protective. These cycles themselves may increase the difficulties that created the frustration and anger in the first place. Hence we have self-sealing processes that create cumulative defensiveness in the people involved. In the hands of competent faculty, however, it is these cumulative, self-sealing, defensive reactions that can provide a breakthrough to learning to learn Model II.

PRESIDENTS APPLY MODEL II

Another group consisting of six entrepreneurs, all presidents of their respective companies, are in the process of moving from Model I toward Model II. They have attended six sessions (ranging from two days to one week) over a period of three years. After the presidents had successfully invented and produced Model II solutions in the classroom (a painful process similar to that undergone by

the 100 administrators), they faced the big challenge—taking their solutions and experimenting with implementing them in their own companies.

Two problems were foremost in their minds. First, and the one to which they alluded throughout their sessions, was concern about the reaction of their subordinates when they began to exhibit their new leadership behavior. Second was discomfort about the prospect of behaving incompetently—as one man put it, “Making asses of ourselves in front of our people.”

Turning to the first problem, the presidents had serious doubts that their subordinates would understand or see Model II behavior as relevant or practical. Because they themselves had expressed the same reactions toward Model II early on in their education, this lent credibility to their fears. Another, and probably more powerful, source of fear was the presidents’ knowledge that, in their relationships with their vice-presidents, they had made many hidden assumptions, practiced many deceptions, and suppressed many doubts, all in the name of acting constructively toward them. For the presidents now to begin to behave in ways that they had previously rejected could arouse concern if not disbelief and bewilderment on the part of subordinates. And if this did happen, subordinates would probably withhold these feelings. This, in turn, would mean an increase in suppressed tension and/or an increase in overt discomfort on the part of subordinates. All these conditions would make introduction of Model II theories-in-use even more difficult.

To compound the problem, the presidents did not believe that they had mastered the new theory-in-use. Indeed, part of the process of mastering it required that they use it effectively in the “real” world. This greatly concerned the presidents because collectively their view of an effective president was one

who was “strong.” To be strong included behaving with confidence and approximating perfection. They believed that they could achieve neither criterion if they attempted Model II interventions at this time in their home settings.

The presidents began to experience several new dilemmas. On the one hand, after years of hard work within the seminars, they had begun to discover, invent, and produce new behavior and meanings that they valued. On the other hand, they feared experimenting with the new behavior because they foresaw negative reactions from subordinates.

They had also learned in the seminars to handle such dilemmas by testing publicly the assumptions embedded in them. For example, their fears about negative reactions on the part of their subordinates required surfacing and testing. If they did not feel fully competent in behaving in accordance with Model II, they had learned to say so publicly. They had also learned to openly assert that what they were going to do was an experiment and that it might not be as successful as they had hoped.

Unfortunately, these cures made the illness worse. If they feared going public with their assumptions, testing these fears publicly would compound their fears; if they felt unsure about their new behavior, candidly saying so would make them appear weak in the eyes of their subordinates. To test this publicly would be embarrassing and bring to the surface their feelings of weakness—feelings that, in their minds, presidents should not express.

"I would not mind going through all this," said one president, "if I knew they wouldn't become confused and disorganized." The faculty member (one of my associates in the seminar) asked this president if he were willing to test that assumption publicly. "There you go again," he responded, "suggesting cures that make the problem worse."

The presidents realized that they were in a double bind. If they chose to experiment, they believed that they could be embarrassed and also harm the functioning of the top group. If they decided to withdraw, however, they would have to admit to themselves that they were controlled by fear and feelings of weakness. To be controlled by such fears obviously would be a sign of weakness, something they all found difficult to accept or admit.

This was a key moment in the group's learning process. Examining the transcript indicates that, although the diagnosis was painful, the choice to move ahead appeared natural and relatively simple. They decided that they had to be masters of their own fate; therefore, if the next step was to experiment, experiment they would.

The learning seminar became the base for the new operation. Each president chose a key issue—such as confrontation of an ineffective executive, development of an effective top-management problem-solving process, or reduction of an operating budget by 20 percent. They discussed it in detail and, with the help of others, invented a range of solutions. Each was produced by the president with the other presidents acting as hard-nosed,

disbelieving, confused, concerned subordinates.

After continual practice that helped them to discover, invent, produce, and generalize new interventions, the presidents began to feel confident enough to try their respective experiments in their own organizations. Several had designed experiments involving one or two persons. Several were interested in exploring Model II theories-in-use with their entire top group. Some experimented alone; others invited a faculty member. All tape-recorded their experiments or wrote detailed scenarios that became a rich source of data for further learning. In all cases, the presidents experienced both success and failure. It was most interesting to see how easily they accepted their failures as episodes from which to learn and how willing they were to say so publicly. This, in turn, unfroze their subordinates and opened them up to explore their relationships not only with their superiors but also with each other and their own subordinates.

Not all subordinates liked Model II interventions (rare or well done). Some preferred the old ways of behaving and were frank to say so. Reading the transcripts, we saw that the presidents were attacked for behaving in ways that were perceived as weird, impolite, and potentially destructive of group cohesiveness. The fears the presidents had expressed were confirmed. However, the presidents did not become angry or punitive. They encouraged these expressions and, drawing from their seminar experience, used them to explore their impact as well as the foundations of cohesiveness within their groups. Perhaps one reason that the presidents could begin to deal with other people's fears effectively was that they had learned no longer to fear their own fears. Because they had begun to learn how to manage their own fears, they could use their newly acquired

skills in helping others express and manage their fears.

Implications from the six entrepreneurs

At the most obvious but still meaningful level, there is the fact that the six entrepreneurs have made progress in experimenting with Model II in their own organizations, are making progress at the present time, and hope to make further progress in the future. That few people at the top would currently choose Model II as their preferred theory-in-use, that even fewer people are competent to make the changeover from Model I to Model II even with prolonged professional assistance, does not diminish the significance of what the six entrepreneurs have achieved so far. Only a few years ago, I wrote that "our own experience and the published research suggest that there now does not exist a top-management group so competent in meeting the requirements of the new ethic (the values incorporated in Model II) that they do not lose their competence under stress." I also expressed the belief that some groups and some organizations eventually would achieve that competence—a belief that our experience with the six entrepreneurs is in the process of confirming.

At another level, our experiences with the six entrepreneurs have deepened our

knowledge of what is involved in learning to learn. This newly acquired knowledge, in turn, should enable us to help other groups similar to the six entrepreneurs in traveling the same road with a little less travail and pain.

What did we learn about learning? The adult learning processes with which we have experimented have turned out to be primarily cognitive. This does not mean that feelings did not surface. Indeed, the fear of fear and fear of embarrassment, hostility, failure, and so forth were continually experienced. However, the presidents coped with these feelings as components of their theory-in-use. Instead of asking, for example, why they feared failure, the participants learned to ask how they could test their fears and behave in ways that made them obsolete.

Following Model II theories-in-use, for example, the presidents did not choose to explore their personal histories to discover the roots of their fear of fear. A theory-of-action perspective informed them that the way to cope with fear of fear was to create learning conditions with those people with whom they were presently involved—initially the other presidents in the seminar and eventually their own subordinates back home. As you may recall, this strategy created some problems, but it was facing these problems

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that led to progress. To repeat the sequences of action:

- They asked what, in the present context, operated as causes of their fear.

- After some discussion, they concluded that it was their fear that, if they behaved in an experimental, uncertain manner, their subordinates might become anxious because they wanted and expected strong leaders.

- Having made the conclusion explicit, they realized that it was, in effect, a series of assumptions about their respective subordinates. According to Model II, assumptions should be tested publicly before they become guides to action.

- This produced a double bind. Publicly to test these fears would compound their fears and probably upset their subordinates. To refuse to test publicly their attributions would mean that they withdrew from an action that made rational sense because they were afraid. To suppress rationality because of personal fears was to be weak.

- The presidents opted to experiment and learn. They utilized seminars to design their experiments, make many trial runs in front of each other (each simulating their worst fears), and develop confidence in their ability to respond effectively to expected resistance or confusion.

- Each president performed his experiment in his home setting differently, and each had varying degrees of success. However, each collected directly observable data, the Model II approach to testing concepts, and learned from his failures. Many subordinates reported surprise concerning the degree of openness of their superiors to explore their failures as well as design further experiments. Indeed, this openness to learning appeared to lead subordinates to explore some of the ineffectiveness among their own relationships.

- The competence to learn from failure and the way their subordinates rewarded their openness to learning served to raise the presidents' levels of aspiration for the next experiment and served as evidence that their fears were not based on valid information. As a result, their fears about experimenting in company settings began to diminish.

IMPLICATIONS FOR LEADERSHIP

Leadership theory will have to distinguish between results obtained at the espoused level and those at the theory-in-use level. To date, the preponderance of data employed in leadership research, including the data used by Professors Vroom and Fiedler, is at the espoused level. Research that remains at the espoused level runs the risk of missing (1) the incongruities between espoused theory and theory-in-use, (2) the blindness to these incongruities, and (3) the unawareness of the unawareness people have about their capacity to discover, invent, produce, and generalize theories of action that challenge the unchallengeable and question the unquestionable. If leadership education is ever to tackle core issues, these factors cannot be ignored.

To the extent that these factors are ignored, leadership education becomes a part of the existing theories-in-use. To the extent that this happens, leadership education will not tend to question the group, organizational, and societal factors that encourage Model I behavior. Leadership education becomes limited to education within the status quo—education that, at best, may transform the world of espoused theories of action and yet have little or no impact on theories-in-use.

Leadership theory and theory about everyday life may overlap much more than 41

has hitherto been assumed. Theories of action shape human behavior under all conditions, and theories-in-use are all minitheories of leadership in that they are theories of influencing others to increase one's own effectiveness. Our research suggests that even those who seek to be followers do so because that is their most effective way of gaining the level of control they seek over their personal lives.

Moreover, Model I theories-in-use are explicit leadership theories that focus on advocacy and unilateral control in order to win. These theories-in-use are consonant with those presently embedded in formal pyramidal structures and management theory. Indeed, this is probably no accident and requires much research.

Strong leaders in a Model I world may well be effective enough to control the world adequately to achieve organizational goals. Leaders whose strength is based on high advocacy and unilateral control over others also tend to hold attitudes that their subordinates need to be controlled, that they fear confronting people with power, that the competition among themselves is great, and that, if left to themselves, the group would fall apart. These assumptions are self-sealing because they are caused by the leadership style in the first place (or, if subordinates had these predispositions before the leader arrived, this style reconfirms and reinforces their utility).

One result of attributing fears and brittleness to one's subordinates is to make such attributions undiscussable because, as we saw in the example of our six entrepreneurs, such a discussion would be a cure that makes the illness worse. Granted, introducing Model II theories-in-use in organizations is fraught with potential failure and fear; but under Model II conditions, these possibilities must become discussable.

As our experiences with the six entrepreneurs have shown, it is possible over a pe-

riod of years to change the theories-in-use of a group of company presidents from Model I to Model II, to create conditions in which their espoused theories and their theories-in-use are congruent, and to introduce Model II theories-in-use in the organization despite the fears and possibilities of failure. We can say about our six presidents (who in each case began as the quintessential Model I manager—"the kind of man I would never work for myself," as one self-description put it) that they had made the transition to being the kind of Model II manager who habitually practices double-loop learning. Once we can say that about the person at the top, the organization is on its way.

Many of the problems confronted and resolved under Model II conditions were serious problems that might never have been confronted at all under Model I or, had they been confronted, might have been less effectively resolved. One organization cut nearly 20 percent of its operating budget with the entire top-management group participating in the process. In another case, the need for an executive position that the president believed the vice-presidents wanted was eliminated when, after a more open discussion, the presidents and the vice-presidents developed a new set of operating procedures that made the proposed executive vice-presidency unnecessary. The relationship between a chairman of the board (and owner of the company) and the president (whom the former had appointed personally) began to deteriorate because the latter's performance had not measured up to expectations. The problems were discussed openly and solutions were generated that pleased both men. More important, the resolution of the problem did not place the vice-presidents in the dilemma of having to take loyalty oaths toward the owner or the president. An unprofitable venture that the president hesitated to close down (because he

had originally decided to create it) was cancelled with the help and advice of the vice-presidents, who had become more open with the president. Last, an organization faced up to the problem of what would happen when and if the president sold out—this being the kind of problem that probably never would surface in a Model I world.

Of course, we have made only a beginning. The presidents have taken the essential first steps in creating a Model II behavioral world with their immediate subordinates. In those instances in which subordinates responded positively, they, in turn, have taken the first painful steps toward creating a Model II behavioral world with their own subordinates. Actually, at this point most of the vice-presidents are where their bosses were three years ago. Relations among the vice-presi-

dents and between the vice-presidents and their subordinates constitute an important inhibiting factor within these organizations.

Much remains to be done. We have said that the formal pyramidal structures that characterize most organizations are embodiments of a Model I theory-in-use. Before we can give an organization a Model II label, its structure, planning mechanisms, and policy-making procedures must all become congruent with Model II theories-in-use. And everyone within the organization, from the highest to the lowest, must understand, accept, and practice Model II as his or her theory-in-use.

All this will take years—and may never take place except in a relative handful of organizations. None of which detracts from the progress so far. Progress worth recognizing, even celebrating. And worth advancing.



SELECTED BIBLIOGRAPHY

The basic conceptual grounds for Model II and the learning processes involved are laid out in Chris Argyris and Donald Schon's *Theory in Practice* (Jossey-Bass, 1974). Another book by Argyris, *Behind the Front Page* (Jossey-Bass, 1973), contains a fascinating account—really a study in failure—of what happened when he tried to help several levels of management at a great metropolitan newspaper to learn and practice Model II behavior. An article by Schon, "Deutero-Learning in Organizations: Learning for Increased Effectiveness" (*Organizational Dy-*

namics, Summer 1975) gives the conceptual background of the various concepts that entered into the development of Model II.

Fred Fiedler and Martin Chemers's *Leadership and Effective Management* (Scott, Foresman and Company, 1975) and Victor Vroom and Philip Yetton's *Leadership and Decision Making* (University of Pittsburgh Press, 1973) are the most recent and complete statements of leadership theory by the other two participants in the symposium, whose ideas conflict with those of Argyris more often than they complement them.